The following papers were read:—

1. Remarks on the Chinese Alligator.

By G. A. Boulenger.

[Received October 7, 1890.]

(Plates LI. & LII.)

Although the first intimation of the existence of a Crocodilian in the Yang-tze-kiang appeared in these Proceedings in 1870[1], it was not until nine years later that M. Fauvel, a French gentleman in the service of the Chinese Customs, made us acquainted with the animal, which surprisingly proved to belong to the American genus *Alligator*. In his excellent paper[2] M. Fauvel not only gave a very satisfactory description of the new Alligator, for which he proposed the name of *A. sinensis*, but dwelt at great length with the former records of it in Chinese literature. A stuffed specimen was forwarded by M. Fauvel to the Paris Museum, where I had the pleasure of examining it in 1880; two others, kept for some time alive by the German Consul von Möllendorff, were after their death transmitted to the Berlin Museum, as we are informed by Boettger[3]. It was not until last year that two specimens, obtained at Kiu Kiang by Mr. Styan, were received in this country, one of which was retained for the British Museum.

The Society has now the advantage of exhibiting two living specimens in its Menagerie[4], presented by Mr. D. C. Janson of Shanghai, on August 26th. Upon these and the stuffed specimen in the British Museum, I propose to offer some remarks, accompanied by a figure of the animal.

The Chinese Alligator belongs to the genus *Alligator* in the restricted sense; its nearest ally is the North-American *A. mississippiensis*, which differs from the Central and South-American forms (*Caiman*) chiefly in the presence of a bony septum dividing the commonly single nasal aperture. However, the Chinese species approaches the Caïmans in the greater development of the bony plate in the upper eyelid and in the presence of ossifications in the ventral shields. These ossifications, however, are wide apart, neither juxtaposed nor imbricate on any portion of the ventral region.

Among the characters hitherto given as diagnostic of *A. sinensis*, two prove not to be constant:—

1. The three pairs of nuchal scutes may be reduced to two, as shown by the larger specimen in the Society's Menagerie; the other specimen has an additional fifth scute on the right side, but it is small. The three pairs are all present in the British-Museum specimen.

[1] Swinhoe, P. Z. S. 1870, p. 410.

[2] A. A. Fauvel, "Alligators in China," Journ. N. China Br. As. Soc. (2) xiii. 1879, pp. 1–36, figs.

[3] O. Boettger, Ber. Offenb. Ver. Nat. 1888, p. 112.

[4] I hear from my friend Dr. Boettger that two specimens have just been received by the Zoological Gardens of Frankfort-on-the-Main.

2. The larger specimen in the Menagerie has as many as eight scutes in the fifth transverse dorsal row, instead of six, which is the highest number in all other specimens known. Except in trivial points the three specimens otherwise agree with Fauvel's description.

In the following enumeration, I designate by *a* the larger specimen in the Zoological Gardens, by *b* the smaller, by *c* the specimeu in the British Museum :—

	a.	*b*.	*c*.
Number of teeth.....	$\frac{17}{19}$	$\frac{17}{19}$	$\frac{17}{19}$
Transverse rows of dorsal scutes	17	18	17
Caudal whorls	33	37	37

Specimen *b* is blackish above, speckled or vermiculated with yellowish on the head and nape, and on the cross bands on the body, limbs, and base of tail. Iris dark, bronzy, vermiculated with black. Specimen *a* is nearly uniform black, with mere traces, here and there, of light vermiculations.

EXPLANATION OF THE PLATES.

Plate LI.

The smaller specimen (*b*) of *Alligator sinensis* in the Society's Gardens, from life, reduced about $\frac{1}{6}$.

Plate LII.

Head and nape of the specimen (*c*) in the British Museum, about $\frac{2}{3}$ of nat. size.

2. On some new Species and two new Genera of *Araneidea*. By the Rev. O. P. Cambridge, M.A., F.R.S., C.M.Z.S., &c.

[Received October 23, 1890.]

(Plate LIII.)

A small collection of Spiders placed in my hands by Mr. Frederick Taylor, of Rainhill, Lancashire, most of them collected in South Africa by the Rev. Nendick Abraham, contains examples of several species of much interest. Four of them appear to me to be undescribed, and on one I have ventured to found a new genus (*Platyoides*) in the family Drassidæ. Together with the above, Mr. Taylor sent me a Spider from New Zealand, which is, I think, without much doubt, *Migas paradoxus*, L. Koch. A trapdoor nest of this Spider accompanied the specimen ; it was found attached to the roots of fern, *i. e.*, I conclude, to the base of the stem, among the loose soil around it. Spiders of the Trapdoor group, as a rule, have the extremities of the falces on the upper side armed with a group of strong spines or teeth ; these are used in the excavation of the cylindrical holes in which the nests are formed, and are well adapted, and probably necessary, for this work. In the genus *Migas*, however, the falces are not so armed, and hence the type, *M. paradoxus*, received its specific name from Dr. L. Koch. The nest now figured is new to science, and its being formed in a situation where excavation in the solid earth is not required somewhat